



United States
Department of
Agriculture

Forest
Service

Arizona Zone
Entomology and
Pathology

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File 3410
Code:
Route To:
Subject: 1999 Insect and Disease Aerial Detection Survey
To: Area Director
Bureau of Indian Affairs
Phoenix Area Office
P.O. Box 10
Phoenix, AZ 85001

Date: November 10, 1999

The annual insect and disease aerial detection survey was conducted over the Fort Apache Indian Reservation on August 4, 16 and 17 1999. This letter provides a summary of the insect and disease conditons recorded on the reservation on these dates.

Bark beetle activity in ponderosa pine remained about the same in 1999 (236 acres) compared to 1998 (252 acres). The bark beetle mortality was scattered throughout the Reservation. Mortality is being attributed to *Ips* spp. (84 acres), western pine beetle (133 acres), and roundheaded pine beetle (19 acres). Mortality occurred mainly in small pockets of 1-10 trees.

Douglas-fir and true fir mortality increased in 1999. Douglas-fir beetle mortality was recorded on 174 acres and true fir mortality on 141 acres. Spruce beetle mortality was seen on 14 acres.

Aspen defoliation increased in 1999 to 3,180 acres (light 1,065 acres and heavy 2,115 acres) compared to 740 acres defoliated in 1998. The cause of the defoliation was attributed to two factors, large aspen tortrix fed on the newly emerged leaves and a late frost damaged the still tender leaves.

No western spruce budworm defoliation was apparent on the Reservation in 1998.

Defoliation by *Nepytia janetae* increased from 1,013 acres in 1998 to 8,630 (1244 acres of light defoliation and 7386 acres heavy) in 1999. No spruce aphid activity was seen on the reservation in 1999.

Fire was recorded on 9,200 acres of the Reservation, an increase from 403 acres in 1998. Fires were recorded scattered throughout Fort Apache but the main concentrations seemed to be along the Black River in addition to the Rainbow fire in and around the community of White River.

Electronic format copies of the map files and data are available to the Area Office, to Fort Apache Bureau of Indian Affairs staff, and to Tribal Forestry staff for use on any projects where this information would be of value. Please forward this letter to the appropriate personnel.



If you have any questions concerning the survey, the information included here, or the availability of maps, please feel free to contact Bobbe Fitzgibbon (520-556-2072) or Steve Dudley (520-556-2071).

/s/ Bobbe Fitzgibbon

Bobbe Fitzgibbon

Acting Zone Leader, Arizona Zone Entomology and Pathology

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